

SCV/50-59-5-9/22

3(7)

AUTHORS: Ped', D. A., Turketti, Z. L.

TITLE: Considering Climatological Data in the Evaluation of Weather Forecasts (Uchet klimatologicheskikh dannyykh pri otsenke prognozov pogody)

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 5, pp 40 - 43 (USSR)

ABSTRACT: At the All-Union Conference on Long-term Weather Forecasts in Moscow in 1957, the necessity of considering the climatic and seasonal features of the regions in compiling and evaluating weather forecasts was stated. In this connection, the problem of setting up new regulations for the terminology and evaluation of long-term weather forecasts turned up. The consideration of climatic features in the terminology and evaluation of weather forecasts is very complicated and hits on a number of practical difficulties. This applies particularly to tolerances in the evaluation of weather forecasts. This complicated problem of the selection of tolerances has hardly been worked out. The tolerances used at present are not sufficiently founded, and do not express the physical-geographical and seasonal features of

Card 1/3

Considering Climatological Data in the Evaluation of  
Weather Forecasts

SGV/50-59-5-9/22

the regions. One of the possible variants for the choice of intervals in compiling weather forecasts for 3-7 days, and of the tolerances evaluated according to the two main elements of the weather - precipitations and air temperature - is put forward here. In establishing the criteria for the evaluation of these elements it is convenient to start from a consideration of the features in the distribution of these elements in the region and depending on the season. The most distinguishing characteristic representing the physical-geographical and seasonal features of the respective region is the variability of temperature and precipitations with respect to time. To determine the tolerances in the evaluation of precipitation forecasts it is suggested to use the data available in the climatological handbooks for the whole area of the USSR. On the basis of the data given here, regions with a number of days with no precipitations were ascertained, namely regions with less than 10 days without precipitations, with 10 to 20 days, and with more than 20 days without precipitations per month. For each of these groups, particular tolerances are to be established for the evaluation of precipitation forecasts. To determine the intervals in air temperature forecasts

Card 2/3

Considering Climatological Data in the Evaluation of  
Weather Forecasts

SOV/50-59-5-9/22

for 3-7 days and the tolerances in the evaluation of temperature it is convenient to take the variability of the daily average of air temperature every 5 days. Table 2 shows these variabilities. On the basis of such data, charts on the variability of the daily average of air temperature have been compiled for the whole area of the USSR. It is convenient to assume the tolerance with 0.75 of the average air-temperature change over many years. Also the interval in the air-temperature forecasts can be assumed in this way. The tolerance thus chosen will be different for different regions and different seasons. On the other hand, it will be possible to compare the evaluation of the forecast in different places and months. A direct evaluation of the forecasts for different regions showed that it became somewhat lower for regions with a smaller change in temperature, and higher for regions with a greater change in temperature - as compared to the evaluation by the usual method (Ref 3). There are 1 figure, 2 tables and 6 Soviet references.

Card 3/3

TURKETTI, Z.I.; KHAZOVA, O.N.

Nature and conditions of the formation of mean monthly temperature anomalies in July in the European part of the U.S.S.R. and Western Siberia and their possible prediction. Trudy TSIP no.89:41-73 '60. (MIRA 14:3)

(Weather forecasting)

PED', D.A.; TURKETTI, Z.L.; POGOSYAN, Kh.P., otv. red.; BLINNIKOV, L.V.,  
red.; ZARKH, I.M., tekhn. red.

[Distribution of the diurnal range of air temperature variations  
in the U.S.S.R.] Raspredelenie sutochnykh amplitud temperatury  
vozdukha na territorii SSSR. Moskva, Gidrometeor.izd-vo (otd-nie)  
1961. 167 p. (MIRA 15:1)  
(Atmospheric temperature)

PED', D.A.; TURKETII, Z.L.

Characteristics of the distribution of diurnal air temperature  
amplitudes. Meteor. i gidrol. no. 11:37-41 N '61. (MIRA 14:10)  
(Atmospheric temperature)

ASTAPENKO, P.D.; BEL'SKAYA, N.N.; BUSHUK, V.I.; BUSHUK, O.A.; GUROV, V.P.;  
ZUBYAN, G.D.; KATS, A.L.; MININA, L.S.; MOROZKIN, A.A.; PAVLOVSKAYA,  
A.A.; POGOSYAN, Kh.P.; SAMOYLOV, A.I.; SMIRNOV, P.I.; TARAKANOV,  
G.G.; TURKETTI, Z.L.; CHERNOVA, V.F.; CHISTYAKOV, A.D;

[Synoptic atlas for schools] Uchebnyi sinopticheskii atlas. Pod  
red. Kh.P.Pogosiana. 3, perer. i dop. izd. Leningrad, Gidrometeo-  
izdat, 1962. 217 gold.col.maps. (MIRA 16:3)

\_\_\_[Assignments for students] Zadaniia dlia uchashchikhsia. Pod  
red. Kh.P.Pogosiana. 138 p. \_\_\_[Methodological instructions and  
recommendations for teachers] Metodicheskie ukazaniia i rekomen-  
datsii dlia prepodavatelei. Pod red. Kh.P.Pogosiana. 73 p.  
(Meteorology—Charts, diagrams, etc.)

PED', D.A.; ~~TURKETTI, Z.I.~~; POGOSYAN, Kh.P., prof., red.; YASNOGORODSKAYA,  
M.M., red.; FLAUM, M.Ya., tekhn. red.

[Atlas of daily ranges of air temperature in the U.S.S.R.] Atlas  
sutochnykh amplitud temperatury vozdukha v SSSR, Pod red. KH.P.  
Pogosiana. Leningrad, Gidrometeorizdat, 1962. 101 p.  
(MIRA 15:6)

(Atmospheric temperature)



TURKETTI, Z.L.

Reliability of basic atmospheric processes used in the preparation of weather forecasts for July. TRUDY TSIP no.115:49-67  
'62. (MIRA 1636)

(Weather forecasting)

L 10833-66 EWT(1)/FCC

ACCESSION NR: AP5023680

UR/0050/65/000/010/0021/0028

UDK.551.509.329

AUTHOR: Z.I. Turketti 44.55

TITLE: Evaluation of lower stratosphere thermal and pressure field features for seasonal weather forecasts

SOURCE: Meteorologiya i gidrologiya, no.10, 1965, 21 - 28

TOPIC TAGS: weather forecasting, 12,44,55 long range weather forecasting, stratosphere, atmospheric pressure, atmospheric temperature

ABSTRACT: The author observed that a perturbed, tortuous, meandering pattern of the monthly average 100 millibar altitude lines north of the 60° latitude during July-August predicts a warm following winter in the USSR south of the 60° latitude. A warm winter is also often observed following a delayed formation and movement of the cold center, i.e. the center of the -60C area of the monthly temperature average isotherms on the 100 millibar surface. In this case, the cold center does not reach the North Pole until December or January. A simple, smooth, single cyclone pattern predicts a cold winter; the cold center formation is then usually completed and sta-

Card 1/2

L 10833-66

ACCENSSION NR: AP5023680

3  
bilized by November. In the supporting statistical study, the winters were characterized by 1) the relative area (%) occupied by a sign of the predominant anomaly of monthly average surface temperatures in the USSR region south of the 60° latitude; 2) by the area, on which the anomaly exceeded the temperature deviation; 3) by one of six designated winter temperature types. Evaluation of these parameters was made for December, January and February of 8 winters: 1957/1958 to 1964/65. The results are considered significant and useful for seasonal weather forecasts. It is realized that the statistical sample of the gross events is small, but it can be augmented by the additional consideration of seasonal and intraseasonal relationships between circulation patterns and features in the stratosphere and in the troposphere. In the troposphere, the 500 millibar altitude patterns can be considered. The orig. art. has: 2 figures, 1 table.

ASSOCIATION: Tsentralnyy Institut Prognozov (Central Institute of Forecasts)

SUBMITTED: 18Apr65

ENCL: 00

44.55  
SUB CODE: 08

NO REF SOV: 008

OTHER: 003

1  
Card 2/2

TURKETTI, Z.I.; USPENSKIY, B.D.

International symposium on the dynamics of large-scale  
atmospheric processes. Izv. AN SSSR. Fiz. atm. i okeana  
1 no.11:1222-1226 N '65.

(MIRA 18:12)

TURKETTI, Z.L., kand. geograf. nauk

Calculation of the characteristics of the thermobaric field  
in the lower stratosphere in compiling seasonal weather forecasts.  
Meteor. i gidrol. no.10:21-28 O '65. (MIRA 18:9)

1. TSentral'nyy institut prognozov.

TURKETTI, Z.L.

Verification of some schemes of the frequency of macroprocesses  
on the "Pogoda" electronic computer. Trudy TSIP no.138:3-53 '65.  
(MIRA 18:4)

PED', D.A.; TURKETTI, Z.L.

Calculating the anomaly of air temperature for a season and its  
parts by the preceding thermal regime. Trudy TSIP no.138:63-86  
'65. (MIRA 18:4)

TURKETTI, Z.L., kand.geograf.nauk

Some problems of the synoptic method of long-range weather forecasting. Meteor.i gidrol. no. 2:42-48 F '64. (MIRA 17:5)

1. TSentral'nyy institut prognozov.



TURKETTI, Z. L.

Possibility of the application of quantitative criteria for the evaluation of similarity in atmospheric processes when forecasting the sequence of their development during the month. Trudy TSIP no. 127:120-136 '63. (MIRA 17:5)

TURKEVICH, A.

USSR/Nuclear Physics - Pi-mesons

Jun 52

"Formation of  $\pi^-$  During Nuclear Reactions of Negative Pi-Mesons With Oxygen and Nitrogen," A. Turkevich, J. B. Niday

"Uspekhi Fiz Nauk" Vol XLVII, No 2, pp 327, 328

Translation by G. I. [initials only] from an English-language article that appeared originally in Phys Review, Vol 84, p 1253, 1951.

225T75

SMIRNOVA, I.N.; BALEZIN, S.A.; GOLOVANOV, K.N.; Primali uchastiye:  
DEM'YANOV, L.A.; TURKEVICH, A.I.; VEROB'YEV, P.I.; FEDOTOV, V.S.;  
CHURILOV, Ye.M.

Effect of organic additives in fuel on the corrosion and wear  
of internal combustion engines. Uch. zap. MGPI no.146:127-146  
'60. (MIRA 15:4)  
(Gas and oil engines--Corrosion) (Addition reactions)

DYBAN, A.P.; TURKEVICH, A.N.

Effect of 3-phenylrhodanine, 3-p-tolylrhodanine and rhodanine-2-benzoic acid on the estrus cycle in white rats. Farm. i toks. 26 no.2:228-233 M-r-Ap '63. (MIRA 17:8)

1. Kafedra gistologii i embriologii (zav. - prof. A.P. Dyban)  
i kafedra farmatsevticheskoy khimii (zav. - prof. N.M. Turkevich)  
L'vovskogo meditsinskogo instituta.

TURKEVICH, A.N.

Activity of serum phosphohexose isomerase in leukemia. Probl.  
gemat. i perel. krovi no.6:30-38 '65.

(MIRA 18:11)

1. Gematologicheskiiy otdel (zav. - dotsent S.M.Martynov) L'vov-  
skogo nauchno-issledovatel'skogo instituta perelivaniya krovi  
(dir. - dotsent D.G.Petrov).

TURKEVICH, B. M. Cand Pharm Sci -- "Thiazolidon and imidazolidon derivatives as organic reagents for inorganic analysis." Len, 1961 (Min of Health UkSSR L'vov Sci Res Inst of Blood Transfusion. L'vov Med Inst). (KL, 4-61, 212)

-398-

TURKEVICH, B.M. [Turkevych, B.M.]

Synthesis of preparations with a possible antileukemic action.  
Farmatsev. zhur. 17 no.3:14-17 '62. (MIRA 17:10)

TURKEVICH, B.M.

Derivatives of azolidine as organic reagents in inorganic analysis.  
Report No. 3: Characteristic reactions of rhodanines. Farmatsev:  
zhur. 15 no.1:15-20 '60. (MIRA 14:5)

1. Khimicheskaya laboratoriya L'vovskogo instituta perelivaniya krovi,  
direktor dotsent D.G.Petrov [Petrov, D.H.], i kafedra farmatsevti-  
cheskoy khimii L'vovskogo meditsinskogo instituta, zav.kafedroy  
prof. M.M.Turkevich. (RHODANINE)



TURKEVICH, B.M. [Turkevych, B.M.]

Synthesis of N-vinylactamide. Farmatsev. zhur. 17 no. 4:3-5 '62.

(MIRA 16:3)

1. L'vovskiy nauchno-issledovatel'skiy institut perelivaniya  
krovi.

(LACTAMIDE)

GERSHENZON, S.M.; KOK, I.P.; SAMOSH, L.V.; TURKEVICH, I.M.; FEDOROVA, I.Ya.

An attempt to induce genetic transformations in animals by desoxy-  
ribonucleic acid and desoxyribonucleoprotein. Zhur. ob. biol. 21  
no.5:387-389 S-O '60.  
(MIRA 13:9)

1. Institut zoologii Akademii nauk Ukrainskoy SSR, Moskva.  
(DESOXYRIBONUCLEIC ACID) (ZOOLOGY—VARIATION)

TURKEVICH, B.M.; KOVALIV, Yu.D.

Electronic absorption spectra of nitroso compounds of the pyrimidine series. Ukr. khim. zhur. 31 no.6:607-611 '65. (MIRA 18:7)

1. L'vovskiy nauchno-issledovatel'skiy institut perelivaniya krovi.

1. TURKEVICH, B.M.; TURKEVICH, N.M.
2. USSR (600)
4. Condensation Products (Chemistry)
7. Substitution in the azolidine ring. Part 7. Condensation of rhodanine with esters of 3-keto acids and with cyclic ketones, B.M. Turkevich, N.M. Turkevich, Ukr.khim. zhur. 16 no. 5, 1950.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

TURKEVICH, D.I., Cand Tech Sci — (diss) "Physico-chemical con-  
ditions of formation of non-metallic <sup>impurities</sup> ~~inclusions~~ in converter rail  
steel." Dnepropetrovsk, 1959. 16 pp (Min of Higher Education  
U.S.S.R. Dnepropetrovsk Order of Labor Red Banner Metallurgical  
Inst im I.V. Stalin). 150 copies (KL, 38-59, 118)

53

TURKENICH, D.I., inzh.; ROSTOVTSSEV, S.T., prof., doktor tekhn.nauk

Dynamics of changes in nonmetallic oxide inclusions during the  
bessemer converter blow. Izv.vys. ncheb.zav.; chern.met no.9:37-44  
S '58. (MIRA 11:11)

1. Dnepropetrovskiy metallurgicheskiy institut.  
(Bessemer process) (Nonmetallic materials)

TURKEVICH, G.I.

Expanding of the vermiculites of the Ukrainian Shield. Min.sbor.  
18 no.1:94-96 '64. (MIRA 18:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut stroitel'-  
nykh materialov i izdeliy, Kiyev.

TURKEVICH, G.I.

Mineralogical characteristics of vermiculites in the Ukrainian  
Crystalline Shield. Min. sbor. no.17:225-230 '63. (MIRA 17:11)

1. Nauchno-issledovatel'skiy institut stroitel'nykh materialov i  
izdeliy Akademii stroitel'stva i arkhitektury UkrSSR, Kiyev.



USSR/Forestry - Biology and Typology of the Forest.

K.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67991

Author : Turkevich, I.V.

Inst : Khar'kov Agricultural Institute.

Title : Several Reasons for the Formation and Development of Water Shoots on Oaks.

Orig Pub : Zap. Khar'kovsk. s.-kh. in-ta, 1957, 16, (53), 151-173.

Abstract : A mass appearance and development of water shoots on the common oak was studied in the oak forests of the Chuguyev-Babchanskiy Forest Economy (Khar'kovskaya Oblast'). It has been established that contrary to the opinion of many authors the fundamental reason for the appearance of a significant quantity of water shoots from previously dormant buds is not the action of light, but rather the total condition of the tree as affected by factors of the

Card 1/3

- 9 -

USSR/Forestry - Biology and Typology of the Forest.

K.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67991

external environment. The principal effect of light is to assist in the preservation of those water shoots which have already appeared. Unmixed, one-stage, excessively thick plantations give rise to the even more unfavorable conditions which cause the developments of water shoots. In mixed, two-stage, 40-year old oak plantations with 0.8 overall density (fresh maple-linden oak forest), according to the author's classification the average ball of coverage of the oak trunk is 1.22, i.e. there are slightly more than 25 water shoots on each tree; and in the unmixed oak forests which are simple in form and have an overall density of 1.2-1.3, the average ball is 2.50-2.64, or 50-100 shoots on each trunk. In the first case the average projection of the oak crown was 20.8 square meters, in the second -- only 4.1 square meters. Other conditions being equal, the trees whose growth was stunted were more heavily covered with water shoots. Severe thinning of dense

Card 2/3

USSR/Forestry - Biology and Typology of the Forest.

K.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67991

plantations provokes the development of dormant buds on the trunks. Trunks of both early and late oak forms can become covered with water shoots if they are growing in conditions which are not suitable for the ecology of the particular form. -- V.F. Lebkov

Card 3/3

- 10 -

TURKEVICH, I. V.

TURKEVICH, I. V. - "The formation and development of water shoots on oaks and their effect on the visibility and quality of plantings." Khar'kov, 1951. In Higher Education Ukrainian SSR. Khar'kov Order of Labor Red Banner Agricultural Institute V. V. Dokuchayev, Chair of General Forestry and Dendrology. (Dissertations for degree of Candidate of Agricultural Sciences.)

SC: Knizhnaya letopis', No 40. 26 November 1951. Moscow.

TURKEVICH, K.I. Asst Professor (Kiev)

"Causes of Sterility in Cows and their Liquidation Methods"

Report given at 13th Inter-VUZ (Higher Educational Insts.) Scientific-Industrial Conference, held February, 1956, at Kiev Vet Inst.

NICULA, A.; STAMIREN, D.; TURKEVICH, J.

Spin electronic resonance of the copper ion in porous crystals.  
Studii cere fiz 16 no.7:755-764 '64

1. Faculty of Physics, the "Eabes-Belyai" University, Cluj  
(for Nicula); 2. Department of Chemistry, Princeton University,  
Princeton, N.J., U.S.A. (for Stamires, Turkevich).

TURKEVICH, John

1879

GUIDE TO RUSSIAN SCIENTIFIC PERIODICAL LITERATURE  
Vol. 3, No. 8, John Turkevich and Ludmila Turkevich,  
Aug. 1950, 33p.

A translation is given of Angular Correlations of Short-  
Range Alpha Particles and Gamma Particles, L. A.  
Kul' chitski, O. D. Latyshev, and D. G. Bulygin, Izvest.  
Akad. Nauk S.S.S.R. 13, No. 3, 331-3(1949). This is an  
amplified version of an article in Doklady Akad. Nauk S.S.S.R.  
84, 67(1949). The former was abstracted as NSA 4-3213 and  
the latter as NSA 4-856.

1ST AND 2ND EDITS  
3RD AND 4TH EDITS

PROCESSES AND PROPERTIES INDEX

8

N

1967  
Brookhaven National Lab.  
GUIDE TO RUSSIAN SCIENTIFIC PERIODICAL LITERATURE. John Turkevich and Ludmila Turkevich. Oct. 1966.  
33p. (BNL-24)

A translation is given of Calculation of Moments of the Distribution Function of Shower Particles, S. E. Solen'ny, Zhur, El'mit', 4 Sovetsk. Fiz. 18: 849-4(1966). An abstract of this, from the Russian, appeared in Nature Science Abstracts as abstract 4-710.

ASIS-ILA METALLURGICAL LITERATURE CLASSIFICATION

10000 STYRENE  
100000 WIP CHV GSC  
001127 GNE  
001127 GNE CHV 184

10000 STYRENE  
100000 WIP CHV GSC  
001127 GNE  
001127 GNE CHV 184

10000 STYRENE  
100000 WIP CHV GSC  
001127 GNE  
001127 GNE CHV 184



1ST AND 2ND COVER										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH COVER									
<div style="text-align: right;">8</div> <div style="text-align: left;">N</div> <p>1979</p> <p><b>GUIDE TO RUSSIAN SCIENTIFIC PERIODICAL LITERATURE.</b>  Vol. 3, No. 8. John Turkevich and Ludmila Turkevich.  Aug. 1990. 33p.</p> <p>A translation is given of Angular Correlations of Short-Range Alpha Particles and Gamma Particles, L. A. Kul'chitski, G. D. Latyshev, and D. G. Belyginaki, Izvest. Akad. Nauk S.S.S.R. 13, No. 3, 331-9(1948). This is an amplified version of an article in Doklady Akad. Nauk S.S.S.R. 64, 87(1949). The former was abstracted as NSA 4-3219 and the latter as NSA 4-336.</p>																													
<p>ASB-ILA METALLURGICAL LITERATURE CLASSIFICATION</p>																													
<p>1ST AND 2ND COVER</p>										<p>3RD AND 4TH COVER</p>										<p>5TH AND 6TH COVER</p>									

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
<p>1678</p> <p><b>GUIDE TO RUSSIAN SCIENTIFIC PERIODICAL LITERATURE.</b>            Vol. 3, No. 8. John Turkevich and Ludmila Turkevich.            Aug. 1950. 33p.</p> <p>A translation is given of Angular Correlations of Short-Range Alpha Particles and Gamma Particles, L. A. Kul' chitski, G. D. Lelyshev, and D. G. Bulyginaki, <u>Izvest. Akad. Nauk S.S.S.R.</u> 13, No. 3, 331-9(1949). This is an amplified version of an article in <u>Doklady Akad. Nauk S.S.S.R.</u> 64, 87(1949). The former was abstracted as NSA 4-3213 and the latter as NSA 4-836.</p>																			
ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION										EXTRAORDINARY									
EXTRAORDINARY										EXTRAORDINARY									
EXTRAORDINARY										EXTRAORDINARY									

1047

Brockhaven National Lab.

GUIDE TO RUSSIAN SCIENTIFIC PERIODICAL LITERATURE. John Turkevich and Loshin Turkevich. Oct. 1950. 33p. (BNL-64)

A translation is given of Calculation of Moments of the Distribution Function of Shower Particles, S. Z. Belen'kii, Zhur. Eksp. i Teoret. Fiz. 19, 940-5 (1949). An abstract of this, from the Russian, appeared in Nuclear Science Abstracts as abstract 6-710.

TURKEVICH, Ludmila

1879

GUIDE TO RUSSIAN SCIENTIFIC PERIODICAL LITERATURE

Vol. 3, No. 8. John Turkevich and Ludmila Turkevich.  
Aug. 1950. 33p.

A translation is given of Angular Correlations of Short-  
Range Alpha Particles and Gamma Particles, L. A.  
Kul'shtak, G. D. Latyshev, and D. G. Bulyginaki, Invest.  
Akad. Nauk S.S.S.R. 13, No. 3, 331-9(1949). This is an  
amplified version of an article in Doklady Akad. Nauk S.S.S.R.  
64, 57(1949). The former was abstracted as NSA 4-3213 and  
the latter as NSA 4-855.

TURKEVICH, M.

MOVCHAN, V.A., TURKEVICH, M., KRASOVSKA, I.

"Experiments with Forcing Carp Growth. From the Studies of the Uk.  
Scientific Research Institute of Fish Culture [Introductory Information]  
Opyty po forsirovannuyu rosta karpov odnolyetok. Iz rabot Uk. n.-1.  
in-ta rubm. kh-va (predvaritelny svyedeniya). Rybnoye Khozyaystvo  
SSSR M., 1933, No 2, pp 35-41.

TURKEVICH, M., prof.

Miracle compounds. Nauka i zhyttia 11 no.2:38-39 P '62.  
(MIRA 15:3)

1. L'vovskiy meditsinskiy institut.  
(DRUGS)

TURKEVICH, M.

27.3500

2220

39854

S/254/62/000/002/001/001

1025/1225

AUTHOR: Turkevych, M.

TITLE: Wonderful drugs

PERIODICAL: Nauka i zhyttya, no. 2, 1962, 38-39

TEXT: Drugs fabricated synthetically and from natural sources are described. Chemists have succeeded in obtaining an alkaloid Vinkamin, which is similar to Reserpin, from the local plant Barvinok (in Ukrainian). This alkaloid is prepared also as Devinkan by the Ougrian Pharmaceutical Industry. In 1956 scientists succeeded in obtaining Reserpin and its analogues, Decaserpil, Siroingonin, Deserpudin, also synthetically, and which are less toxic for the organism. The composition LSD<sup>25</sup>, recently found synthetically, provoke optical and accoustic hallucinations. In smaller portions it is used for treatment of nervous disturbances. From LSD<sup>25</sup> the drugs Redergam, Dehydroergotamin and Dehydroergotoxin are obtained for use against high blood pressure, disorders in cerebral blood circulation and spontaneous gangrene. Mescaline and Bufotenine are now obtained synthetically, serving as foundations for hypotensive drugs and tranquilizers, such as: Meprometan (Ougrian Andaxin), Amizil (Benaktazin) and Diaphen. For treatment of depressive states the chemists found: Meridil (Ritalin), Piridrol, Imizin (Tofranil) and others.

Card 1/1

PETLICHNA, L.I. [Petlychna, L.I.]; VVEDENSKIY, V.M. [Vvedens'kyi, V.M.];  
TURKEVICH, M.M. [Turkevych, M.M.]

3-alkyl derivatives of rhodanine, their synthesis and properties.  
Farmatsev. zhur. 16 no.4:7-9 '61. (MIRA 17:6)

1. Kafedra farmatsevticheskoy khimii L'vovskogo meditsinskogo  
instituta.



GNIDETS, I.R. [Hnidets', I.R.]; PINYAZHKO, I.R.M.; TURKEVICH, M.M.  
[Turkevych, M.M.]

Activities of the Lvov Province Scientific Pharmaceutical  
Society in 1960. Farmatsev. zhur. 16 no.4:87-90 '61.  
(MIRA 17:6)  
1. L'vovskoye oblastnoye nauchno-farmatsevticheskoye obshchestvo.

TURKEVICH, M.M. [Turkevych, M.M.];

Measures for further improvement of the pharmaceutical  
service for the population of the Ukrainian S.S.R. and tasks  
in the field of pharmacy. Farmatsev, zhur. 18 no.4:11-19 '63.  
(MIRA 17:7)

1. L'vovskiy meditsinskiy institut.

ZUBENKO, V.G. [Zubenko, V.H.]; TURKEVICH, M.M., [Turkevych, M.M.], prof.

Synthesis of azolidine derivatives with a possible hypoglycemic action.  
Farmatsev. zhur. 16 no. 2:10-15 '61. (MIRA 14:4)

1. Kafedra farmatsevticheskoy khimii L'vovskogo meditsinskogo  
instituta, zav. kafedroy prof. M.M. Turkevich.  
(SULFONAMIDES)

TURKEVICH, M.M. [Turkevych, M.M.]; PINYAZHKO, I.R.M.; GNIDETS', I.R.  
[Hnidets', I.R.]

Review of some pharmaceutical periodicals. Farmatsev. zhur. 15  
no.1:85-87 '60. (MIRA 14:5)

1. L'vovskoye oblastnoye nauchnoye farmatsevticheskoye obshchestvo.  
(PHARMACY—PERIODICALS)

TURKEVICH, M.M. [Turekvyeh, M.M.]

Influence of substituents in molecules of 3-substituted rhodanines on the sensitivity of the reaction with a cation of copper. Farmatsev. zhur. 16 no.3:17-20 '61. (MIRA 14:6)

1. Kafedra farmatsevticheskoy khimii L'vovskogo gosudarstvennogo meditsinskogo instituta, zaveduyushchiy Kafedroy prof. M.M. Turkevich.  
(RHODANINE) (COPPER SALTS)

TURKEVICH, M. N., Doc Bio Sci, <sup>11</sup>ROLE OF THE NERVOUS SYS-  
TEM, HYPOPHYSIS, AND CONNECTING TISSUE IN THE DEVELOPMENT  
OF CANCER OF THE MAMMARY GLANDS. (EXPERIMENTAL <sup>study</sup> ~~REPORT~~),  
KIEV, 1960. (ACAD SCI UKSSR. DEPT <sup>of</sup> ~~BIO~~ Sci). (KL, 2-61,  
203).

-63-

U.

USSR/General Problems of Pathology - Tumors. Metabolism.

Abs Jour : Ref Zhur - Biol., No 19, 1958, 39569

Author : Turkevich, M.N.

Inst :

Title :

On the Problem of the Role of the Anterior Lobe of the Pituitary Upon the Development of Mammary Carcinoma in Mice.

Orig Pub : Patol. fiziologiya i eksperim. terapiya, 1957, 1, No 3, 28-34.

Abstract : The gonadotropic function of the pituitary (GTP) by the weight of the sexual organs was investigated in various strains of mice [highly susceptible to cancer C<sub>3</sub>H/A with unbalanced excitatory and inhibitory and balanced nervous processes; white laboratory mice not affected with cancer; low cancerous strain C<sub>57</sub> without the milk factor (MF) aged 5-5½ months], during the various periods of the estral cycle. Rhythmical changes in the excretion

Card 1/2

- 17 -

USSR/General Problems of Pathology - Tumors. Metabolism.

U.

Abs Jour : Ref Zhur - Biol., No 19, 1958, 39569

of gonadotropins (EG) were observed during the cycle in the white laboratory mice and the C57 mice; during diestrus the secretion increased, and during estrus it diminished. In C<sub>3</sub>HA mice with an unbalanced nervous system (the excitatory process predominated over the inhibitory), the EG increased somewhat during the estrus stage, but in mice with strongly balanced nervous processes such disturbances of the rhythm of the GTP were almost absent. Administration of MF to C57 mice failed to disturb the GTP. Forced breeding of the C57 mice led to a marked increase of their sensitivity to MF (the frequency of tumor occurrence was about 90% instead of 9-14%). The disturbance of the rhythm of EG is one of the forms of hormonal disorders leading to the development of mammary carcinoma. -- V.S. Genes.

Card 2/2



TURKEVICH, M.V.; TARANENKO, V.M.

Actinidia. Nauka i zhyttia 10 no. 12:39 D '60.  
(Climbing plants)

(MIRA 14:4)

USSR / Human and Animal Morphology (Normal and Pathological).  
Methods and Techniques of Investigation.

S

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2882

Author : Turkevich, N. G.

Inst : Not given

Title : A New Method of Reconstruction of Histological Objects:  
Graphic Reconstruction of Microscopic Objects on a  
Vertical Plane

Orig Pub : Arkhiv anatomii, gistol. i embriol., 1958, 35, No 2,  
101-105

Abstract : A detailed description of a reconstruction method with  
utilization of graph paper is given. It is concluded  
that this method is less cumbersome than the one of  
plastic reconstruction.

Card 1/1

ZVEREV, N.; MAZITOV, B.[translator]; TURKEBAYEV, N., red.;  
KUZ'MIN, Ye., red.

[Guide to the Exhibition of the National Economy of the  
Kazakh Soviet Socialist Republic] Putevoditel' Narodno-  
khoziaistvennoi vystavki Kazakhskoi Sovetskoi Sotsiali-  
sticheskoi Respubliki. Almaty, 1961. 156 p. [In  
Kazakh and Russian] (MIRA 18:5)

1. Alma-Ata. Narodnokhozyaystvennaya vystavka Kazakhskoy  
Sovetskoy Sotsialisticheskoy Respubliki.

1. Method of forecasting the seasonal anomaly of air temperature by its character in the preceding months. Trudy TSIP no. 132:75-92 '64.

(MIRA 17:10)

COUNTRY : USSR  
 CATEGORY : General Biology.  
 ABS. JOUR. : Individual Development. Embryonic Development. B  
 : RzhBiol., No. 2, 1959, No. 5086  
 AUTHOR : Turkevich, E. G.  
 INST. :  
 TITLE : Another Embryonic Organ of the Human Brain  
 : (Organ IV of the Brain Ventricle).  
 ORIG. PUB. : Arkhiv anatomii, gistol. i embriol., 1957, 34,  
 : No 6, 45-50  
 ABSTRACT : In an embryo about 100 mm long on the level of  
 : the caudal part of the rhomboid fossa, a forma-  
 : tion develops which the author calls "organ IV  
 : of the brain ventricle". It contains in its  
 : tissue which is rich in vessels, branching  
 : tubules 100 mm in length, lined with cells which  
 : open into the cavity of the ventricle. Within  
 : the first years after birth the lumen of  
 CARD: 1/2

-21-

Country : USSR  
Category :

Abs: Jour :

Author :  
Institut. :  
Title :

Orig Pub. :

Abstract : these tubules becomes irregular and in some places it is nearly or completely closed by the considerably changed elements of the lining. The involution of the organ is probably completed within the first years of life. In its formation and structure it is very similar to the precommissural organ, which was discovered by the author in the cap area of the diencephalon. Both formations initiate at the same time and become subjected to involution in the postembryonic period. -- I. I. Gutner

Card: 2/2

TURKEVICH, N.G. (g.Chernovitsy, Ukrainskaya ul., d.13, kv.4)

More about an embryonic organ of the human brain (organ of the fourth cerebral ventricle) [with summary in English]. Arkh. anat.gist. i embr. 34 no.6:45-50 N-D '57. (MIRA 11:3)

1. Kafedra normal'noy anatomii (zav.-dots. N.G.Turkevich)  
Chernovitskogo meditsinskogo inatituta.  
(CEREBRAL VENTRICLES, embryol.  
organ of 4th cerebral bentricle, histol.)

TURKEVICH, N.G. (Chernovtsy, ul. Ukrainskaya, 13, kv.4)

Isolineal reconstruction on a sloped plane. Arkh. anat., gist. 1  
embr. 47 no.8:111-116 Ag '64. (MIRA 18:4)

1. Kafedra normal'noy anatomii (zav. - prof. N.G.Turkevich)  
Chernovitskogo meditsinskogo instituta.



TURKEVICH, N.G. (Chernovtsy, Ul. Ukrainskaya 13, kv.4.)

Embryonic development of the vascular plexus of the  
fourth cerebral ventricle and of the "spongy organ" in  
man. Arch. anat., gist. i ombr. 44 no.4:81-93 Ap '63.  
(MIRA 17:6)

1. Kafedra normal'noy anatomii (zav.-doktor med. nauk prof. N.G.  
Turkevich) Chernovitskogo meditskinskogo instituta.

TURKEVICH, N.G. (g.Chernovitsy, Ukrainskaya ul., d.13, kv.4)

A new method of reconstructing histological objects: graphic reconstruction by projection onto a vertical plane. Arkh. anat.gist. i embr. 35 no.2:101-105 Mr-Apr '58 (MIRA 11:5)

1. Kafedra normal'noy anatomii (zav. - dots. N.G. Turkevich) Chernovitskogo meditsinskogo instituta.

(HISTOLOGY,

reconstruction of histol. objects by graphical projection onto vertical plane (Rus))

TURKEVICH, N.M.

"Replacement in the azolidine ring", (Report 1): N.M. Turkevich and I. M. Kuz'mak,  
"The condensation of rhodanine with ketones". (Report 2): N. M. Turkevich, N.K. Ushenko,  
and I. M. Kuz'mak, "The character of individual atoms and of groups within the rhodanine  
molecule", Ukr. Khim. zhurnal. Vol. XIV, Issue 2 1949, p. 122-30,--Bibliog: p. 125, 130.

SO: U-4392, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 21, 1949)

is bound to the  $\alpha$  group and the  $\beta$  group, the end.  
COH is neutralized with NH<sub>3</sub>. (C. M. Kozlovskii)

14KREVRH 10.11

Substitution in the azolidine ring. III. Stability of rhodanines and their oximes. N. M. Turkevich and I. I. Kuznetskii (Inst. Med., Lvov). *Ukrain. Khim. Zhur.* 16, No. 4, 451-8 (1950).—By following the reaction rates between  $\text{NaHSO}_3$  and aq. solns. of rhodanine (I), 5-methylrhodanine (II), and their oximes, 2-hydroxypseudothiohydantoin (III) and 2'-hydroxy-5-methylpseudothiohydantoin (IV), resp., by means of iodine titration of the unreacted bisulfite, it was concluded that the introduction of a Me group into the 5-position stabilizes the azolidine ring in I and III. The substitution of the isonitroso group with S similarly resulted in a stabilization of the ring and slower reaction rates with  $\text{NaHSO}_3$ . Analogous reactions with benzylidenes and 3-phenylrhodanines could not be studied because of the insolubility of the 3 compds.

Gerard Ausleger |

Substitution in the azolidine ring. IV. Synthesis of  
2,4-thiazolidinedione 3-oxime. N. M. Turkevich and O. P.  
Melnichuk (Inst. Med. Chem., Lvov). *Ukrain. Khim. Zhur.* 16,  
No. 4, 459-64 (1950); cf. preceding abstr. — A mixt. of 0.01  
mole rhodanine in 50 ml. MeOH, 0.09 mole  $\text{NH}_4\text{OH} \cdot \text{HCl}$  in  
saturated  $\text{H}_2\text{O}$  soln., and 0.09 mole anhyd.  $\text{AcONa}$  was refluxed  
4 hrs., the product S filtered, and filtrate concd. to give  
34%  $\text{NH}_4\text{CO}_2\text{CH}_2\text{S.C:NOH}$  (I), m. 189-90°. The follow-

ing derivatives of I were also prepd. similarly: 5-benzyl (II), m.  
230°; 5-Me (III), m. 183°; 3-Me (IV), m. 211°. Refluxing  
II (1 g.) with 10 ml. concd.  $\text{HCl}$ , extg. the mixt. with  $\text{Et}_2\text{O}$ ,  
and evapg. the ext. to dryness gave a solid, which was  
refluxed 0.5 hr. with 2 ml.  $\text{AcOH}$ , 0.5 g.  $\text{AcONa}$ , and 0.5 g.  
 $\text{BzNH}$ , the soln. concd. and cooled to yield crystals of  
 $\text{NH}_4\text{CO}_2\text{CH}_2\text{S.C:CHPhS.CO}$ , m. 239°. The oximes gave the  
following order in decreasing resistance to alk. hydrolysis:  
II > III > I > IV.

G. Megaw (in

**Substitution in the azolidine ring.** V. Preparation of 2-thiono-4-oxazolidinone and its transformations. N. K. Lashko and I. B. Gorizhka (*L'vov Inst. Med. & Pharm. Acad., Zhur.*, 16, 545-551 [1950] (in Russian), 4 and 14 Ann. Chir., 3 (1948); 16 + 59-64 [1950]). To 65 g. (1 mole) of HCHO & KCN ground in little H<sub>2</sub>O was added 31 ml. 70% EtOH and 2 moles 30% HCl, the mixt. left overnight, filtered, and the filtrate refluxed 1 hr. on a steam bath and extd. with the filtrate refluxed 1 hr. on a steam bath and extd. with Et<sub>2</sub>O, yielding 17.9% 2-thio-4-oxazolidinone (I) m. 113° (from H<sub>2</sub>O). This gives a weak SH test in 10% NH<sub>4</sub>OH or Na<sub>2</sub>CO<sub>3</sub> with Na nitroprusside; in 10% NaOH the test is strong. Refluxed with aq. Ba(OH)<sub>2</sub> 3 hrs.; I gave some H<sub>2</sub>S and considerable CNS ion; the soln. contained HOCH<sub>2</sub>COH. I with PhNH<sub>2</sub>NH<sub>2</sub> in EtOH gave some HS even in the cold, and after heating on a steam bath yielded 92.5% C<sub>6</sub>H<sub>5</sub>CN, and after heating on AmOAc, apparently not a pentaurethane in 182° (from AmOAc), apparently not a pentaurethane in 182° (from Anhydride I) (2.34 g.), 10 ml. AcOH, 2 g. of I but a cyclic anhydride (II) (2.34 g.). 10 ml. AcOH, 2 g. dry NaOAc, and 3 g. BzH refluxed 1 hr. gave 72.5% benzylidene deriv. (II), m. 188° (from EtOH), which heated with NaOH, gave a strong violet color, with nitroprusside, refluxed with Ba(OH)<sub>2</sub> 4 hrs., I liberated much CNS ion, with some H<sub>2</sub>S, and PhCH<sub>2</sub>COCO<sub>2</sub>H, m. 150°, was isolated. Refluxing II with PhNH<sub>2</sub>NH<sub>2</sub> in EtOH gave a yellow product, C<sub>6</sub>H<sub>5</sub>CH=CHCN, m. 107°. I heated with o-HOC<sub>6</sub>H<sub>4</sub>CHO, C<sub>6</sub>H<sub>5</sub>CH=CHCN, m. 107°. I heated with o-HOC<sub>6</sub>H<sub>4</sub>CHO, NaOAc, and AcOH gave 66% 5-(o-HOC<sub>6</sub>H<sub>4</sub>CH=CH)-C<sub>6</sub>H<sub>5</sub>CH=CHCN, m. 202° (from EtOH). Similarly were obtained 80%, 5-(PhCH=CHCH=CH)-C<sub>6</sub>H<sub>5</sub>CH=CHCN, m. 178°, 85%, 5-(p-MeOC<sub>6</sub>H<sub>4</sub>CH=CH)-C<sub>6</sub>H<sub>5</sub>CH=CHCN, m. 162°, and 78.6%, 5-(p-MeNC<sub>6</sub>H<sub>4</sub>CH=CH)-C<sub>6</sub>H<sub>5</sub>CH=CHCN, m. 162°. All heated with aq. NaOH gave the SH test. VI. Synthesis and properties of 5-aryl- and 5-dialkyl-2-thiono-4-oxazolidinones. Ibid. 552-7. To 30.5 g. KCN and 14.5 g. CH<sub>3</sub>I in a little H<sub>2</sub>O was added with cooling 53 g. PrEt, then 2 moles 20% HCl over 45 min. and the mixt. heated on a steam bath 1 hr., dil'd. with H<sub>2</sub>O, and cooled, yielding 64% 5-phenyl-2-thio-4-oxazolidinone (I), m. 130° (from H<sub>2</sub>O), boiled with aq. NeOH it shows a strong SH reaction with

[illegible]

hrs. gave (from 1.33 g. I) some 0.6 g. orange 5-citrylidene-rhodanine [5-(3,7-dimethyl-2,6-octadienylidene)rhodanine], m. 140° (from EtOH); II gave the 5-citrylidene deriv., m. 101-2°. VIII. Characteristic reactions of thiazolidines. N. M. Turkevich and M. P. Makukha (Lvov Med. Inst.). *1922*. 5,5-*O*-Substituted rhodanines (28 examples) were tested for color reactions with several common metal ions, by mixing alc. solns. of the rhodanine deriv. with FeCl<sub>3</sub>, CuSO<sub>4</sub>, NiSO<sub>4</sub>, AgNO<sub>3</sub>, and Na<sub>2</sub>Fe(CN)<sub>5</sub>NO, resp. (the latter reagent gave the best results with NaOH or EtONa added to the mixt.); with rhodanine (I) and its derivs. (substituents given) the results were: H, —, green, —, yellow, red-violet; 5-Me, —, green, —, yellow, red-violet; 5-Me, —, red, red, brown, blue-violet; 3-Ph, —, red, red, brown, blue-red; 3-C<sub>6</sub>H<sub>5</sub>, —, red, red, yellow, blue-violet or red; 3-(p-EtOC<sub>6</sub>H<sub>4</sub>), —, red, red, yellow, blue or red; 5,3-MePh, —, —, —, brown, brown; 5,5-Ph(Me<sub>2</sub>CH), —, —, —, brown, brown-red; condensation product from " and B<sub>2</sub>, B<sub>2</sub>, —, —, —, green-yellow, lilac; 5-(PhCH<sub>2</sub>), —, —, —, green-yellow, —; 3,5-Me(PhCH<sub>2</sub>), gave no colors with metal salts; 5-(p-MeNC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>), gave only red color with AgNO<sub>3</sub>; 3,5-Ph(PhCH<sub>2</sub>), only gave a green color with CuSO<sub>4</sub>; 5-citrylidene, gave only a green-yellow color with AgNO<sub>3</sub>; 5-citrylidene-3-phenyl, —, —, —, yellow, —; 5-AcCH<sub>2</sub>CH<sub>2</sub>, —, —, —, yellow, brown; 5-MeC, —, —, —, yellow-green, brown; 5-(MePhC), —, —, —, yellow, —; 5-(Ph<sub>2</sub>C), —, —, —, yellow, —; 5-cyclohexylidene, —, —, —, green-yellow, —; 5-cyclohexylidene-3-phenyl, —, —, —, brown, —, yellow-brown, —; 5-(Me(C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>)), —, —, —, yellow, red; 3,5-(Me(C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>)), —, —, —, brown-yellow, —. The following new rhodanines are reported: shaking an equimolar mixt. of PhNHCS<sub>2</sub>NH<sub>2</sub> and MeCHCHBrCO<sub>2</sub>Na in H<sub>2</sub>O gave on acidification 5-isopropyl-3-phenylrhodanine, m. 83-4°. Condensation of α-amino-camphor, CS<sub>2</sub>, NH<sub>4</sub>OH, and ClCH<sub>2</sub>CO<sub>2</sub>Na gave a yellow resinous product, but its behavior indicated the structure of a

rhodanine. Condensation of I with uretropine in alc. NaOH soln. gave a yellow condensation product, C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>S<sub>2</sub>, decomp. 230°, which shows 2 acidic H atoms on titration. Nitroprusside reagent in concd. NaOH can be used to detect 3-substituted rhodanines, a blue or violet-blue color being formed if the 6-position is unsubstituted. Tests with pseudohydantoin were made similarly (substituents given, and the metal ions listed in the same order as above): H, —, —, —, white, brown; 6-PhCH<sub>2</sub>, —, —, —, white, —; 3-allyl (chloride), —, —, —, violet-red. Benzylidenrhodanine phenylhydrazones, brown, brown, —, yellow, —, —, Rhodanine oximes: H, lilac, green, —, white, —; 6-Me, lilac, green, —, white, —; 3-Me, —, —, —, brown; 5-PhCH<sub>2</sub>, lilac, green, —, green, —. Na penicillin gave a yellow color with AgNO<sub>3</sub> and brown with nitroprusside and EtONa. 4-Thiazolidinones: 2,3-Ph, gave only a brown color with nitroprusside and EtONa; 5,2,3-MePh, and 5-methylthiazolidone gave a red-brown color with FeCl<sub>3</sub> only; 2-Ph-3-(5,3,2-Me(HOCH<sub>2</sub>CH<sub>2</sub>)(HOC<sub>6</sub>H<sub>4</sub>)), and 5,3,3-Me(HOCH<sub>2</sub>CH<sub>2</sub>)(HOC<sub>6</sub>H<sub>4</sub>)), gave only brown color with nitroprusside and EtONa; 5,3,2-Me(HOCH<sub>2</sub>CH<sub>2</sub>)(ClC<sub>6</sub>H<sub>4</sub>) gave the same result. Thiazolidinones gave no color tests, while its 3-(PhCH<sub>2</sub>) deriv. gave only white ppt. with AgNO<sub>3</sub>. A red-brown color with FeCl<sub>3</sub> formed with thio-oxazolidone, its 5,5-Me, 5,5-MeEt, 5-Ph, 5-(PhCH<sub>2</sub>), (PhCH<sub>2</sub>CHCH<sub>2</sub>) and 5-oxazolidene derivs. White or greenish ppts. with AgNO<sub>3</sub> were obtained with the above derivs. (except 5-methyl-5-ethyl) and with the 5-furfurylidene deriv. the 5-thiobutene deriv. gave a yellow color with AgNO<sub>3</sub>, the red being formed with the 5-(p-MeNC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>) deriv.

furazone deriv. Heating concd. solns. of NH<sub>4</sub>CNS and Cl<sub>2</sub>CCO<sub>2</sub>H gave yellow xanthonylides, or C<sub>6</sub>H<sub>5</sub>N<sub>2</sub>S<sub>2</sub>, whose properties resemble those of pseudothiohydantoins

G. M. Kosolapoff



Turkevich, N. M.

Transformations of thioglycolamides and their carbamoyl derivatives. N. M. Turkevich and N. P. Yavorskii (Lvov Med. Inst.). *Dokl. Akad. Nauk. Zhur.* 16, No. 6, 639-47 (1950) (in Russian).—Amides of  $\text{H}_2\text{NCOSCH}_2\text{CO}_2\text{H}$  (I) and  $\text{HSCCH}_2\text{CO}_2\text{H}$  are converted by  $\text{PhSO}_2\text{Cl}$  in alk. medium into amides of  $\text{S}(\text{CH}_2\text{CO}_2\text{H})_2$ . Amides of I are reagents for Ag and Hg ions.  $\text{H}_2\text{NCOSCH}_2\text{CONHPh}$  (II) (2.1 g.) in 15 ml. aq. soln. of 1.6 g. NaOH filtered and the filtrate treated with 2.1 g.  $\text{BaCl}_2$  yielded 100%  $\text{S}(\text{CH}_2\text{CONHPh})_2$  (III), m. 145-9°. Similar reaction with  $\text{PhSO}_2\text{Cl}$  gave 90.3%  $\text{S}(\text{CH}_2\text{CONHPh})_2$ , m. 135°, formed also in good yield (m. 160-2°) on heating I with  $\text{BaCl}_2$  in  $\text{EtOH}$ .  $\text{ClCH}_2\text{CO}_2\text{H}$ , 2-phenetidine and  $\text{S}(\text{H})_2\text{CNS}$  in  $\text{MeOH}$  gave 47% 2- $\text{H}_2\text{NCO}_2\text{SCH}_2\text{CONHCH}_2\text{CH}_2\text{OH}$ , m. 175-7°. This (2.54 g.) in 18 ml. aq. NaOH (1.6 g. NaOH), treated with 2.1 g.  $\text{BaCl}_2$  gave 95.5% 2- $\text{EtOCH}_2\text{CH}_2\text{SCH}_2\text{CONHCH}_2\text{CH}_2\text{OH}$ , m. 145-6° (from  $\text{EtOH}$ ). Similar reaction with  $\text{PhSO}_2\text{Cl}$  gave 2- $\text{EtOCH}_2\text{CH}_2\text{SCH}_2\text{CONHCH}_2\text{CH}_2\text{OH}$ , m. 158° (from  $\text{EtOH}$ ). Reducing 12.6 g.  $\text{ClCH}_2\text{CO}_2\text{H}$ , 10.2 g.  $\text{NH}_4\text{CNS}$ , and 15.0 g.  $\text{EtNHPh}$  in  $\text{MeOH}$  5 hrs. gave 33%  $\text{H}_2\text{NCOSCH}_2\text{CONHPh}$ , m. 110° (from  $\text{C}_6\text{H}_6$ ). 2- $\text{C}_6\text{H}_5\text{NHCOSCH}_2\text{CH}_2\text{SH}$  reduced 10 hrs. in  $\text{C}_6\text{H}_6$  with 1.3 g.  $\text{BaCl}_2$  gave 2- $\text{C}_6\text{H}_5\text{NHCOSCH}_2\text{CH}_2\text{SCH}_2\text{CH}_2\text{SH}$ , m. 157-9°; the original amide treated with  $\text{BaCl}_2$  in aq. NaOH, as described above formed 100% 2- $\text{C}_6\text{H}_5\text{NHCOSCH}_2\text{CH}_2\text{SCH}_2\text{CH}_2\text{SCH}_2\text{CH}_2\text{SH}$ , m. 160-1°, a similar reaction with  $\text{PhSO}_2\text{Cl}$  gave 2- $\text{C}_6\text{H}_5\text{NHCOSCH}_2\text{CH}_2\text{SCH}_2\text{CH}_2\text{SCH}_2\text{CH}_2\text{SCH}_2\text{CH}_2\text{SH}$ , m. 200°. The dithioglycolamides listed above gave yellow-brown or brown colors with ammoniacal solus. of  $\text{CuSO}_4$ ,  $\text{AgNO}_3$ ,  $\text{HgCl}_2$ , and nitroprusside. The Ba deriv. gave a white ppt. with ammoniacal  $\text{AgNO}_3$ . G. M. Kosolapoff

TURKEVICH, N. M.

USSR/Chemistry - Analytical,  
Pharmaceuticals

Sep/Oct 51

189T13

"Alkaline Hydrolysis of Thiazolidines and Its  
Analytical Application," N. M. Turkevich, M. P.  
Marukha, I'vov State Med Inst

"Zhur Analit Khim" Vol VI, No 5, pp 308-316

Examd alk hydrolysis of 71 S-contg substances  
(listed with analytical data), including thioce-  
nines, thiazolidones, thiazolidinediones, pseudo-  
hydantoins, 2-thiono-4-oxazolidones, etc. Of  
these compds penicillin, 5-benzylidenethiocyanine

189T13

USSR/Chemistry - Analytical,  
Pharmaceuticals (Contd) Sep/Oct 51

oxime, 3-phenyl-5-citrylideneethiocyanine have most  
stable thiazolidine ring under alk hydrolysis.  
Proposes method for qual analytical examn of these  
S-contg compds.

189T13

1. TURKEVICH, N.M.; YAVORSKIY, N.P.
2. USSR (600)
4. Amides
7. Transformations of thioglycol amides and their carbamyl derivatives, N.M. Turkevich, N.P. Yavorskiy, Ukr.khim.zhur. 16 no. 6, 1951.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953. Unclassified.

1. TURKEVICH, N. M.; MAKUKHA, M. P.
2. USSR (600)
4. Thiazolidine
7. Substitution in the azolidine ring. Part 8. Characteristic reactions of thiazolidines, Ukr. khim. zhur., 16, No. 6, 1951.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

*Handwritten:* Turkevič

1 Soluble compounds of bismuth. VI. Structure of bismuth lactates. N. P. Yavorskii and N. M. Turkevich (Mod. Inst., L'vov). *Ukrain. Khim. Zhur.* 18, 371-5 (1972); cf. *C.A.* 48, 3290f. The water-sol. Bi lactate is really  $\text{Bi}(\text{O})_3 \cdot 3\text{H}(\text{CH}_3\text{CH}(\text{OH})\text{CO}_2\text{H})$  (Telle, *C.A.* 3, 573); its stability as a complex is poor since with a variety of reagents ( $\text{H}_2\text{S}$ ,  $\text{NH}_3$ , alkalis, chromates, phosphates, iodides, and iodates) it yields ppts., while org. acids yield insol. org. Bi compounds. Treatment of 35 g. moist freshly prepd.  $\text{Bi}(\text{OH})_3$  with 10 ml.  $\text{H}_2\text{O}$  followed by 30 g.  $\text{MeCH}(\text{OH})\text{CO}_2\text{H}$  and 5 vol.  $\text{EtOH}$  gave 28 g. colorless solid,  $\text{C}_6\text{H}_9\text{O}_7\text{Bi}$ , an anhydride lactate of Bi; it is generally insol. except for mineral acids; it forms a sol. complex with Na lactate. The same insol. substance forms on refluxing I in  $\text{C}_6\text{H}_5$  in the presence of  $\text{PhNH}_2$ , with azeotropic removal of  $\text{H}_2\text{O}$ ; it also forms on treatment of lactic acid in  $\text{H}_2\text{O}$  with  $\text{Bi}(\text{OH})_3$  and keeping the mixture, after initial warming to  $55^\circ$  and filtration, for 7 days. Addn. of 10 g. Bi nitrate-tartrate to 21 g.  $\text{MeCH}(\text{OH})\text{CO}_2\text{H}$  in 35 g.  $\text{H}_2\text{O}$  at the b.p. and refluxing 3 hrs. gave after filtration, while hot, 2.2 g. *dibisbismutholactate*,  $\text{C}_6\text{H}_9\text{O}_7\text{Bi}_2$ , which is insol. in  $\text{H}_2\text{O}$  and sol. in  $\text{NH}_4\text{OH}$  and alkalis; it forms sol. complexes with Na lactate and tartrate. G. M. Kosolapoff

Substitutions in the 2-thiazolidine ring. IX. Stability of thiazolidine ring in alkaline hydrolysis. N. I. Tugachev and R. I. Shevelkin (Med. Inst. Leningrad Univ. *Zhur.* 18, 513-18 (1952) (in Russian); cf. *C.A.* 48, 11392a. On the basis of the rate of hydrolysis by *N*, 0.1 *N*, and 0.01 *N* NaOH, the ring stability of the following compounds was found to depend on the function at position 2 (stability increased in the order :NOH, :S, :O, and :NH): pseudothiohydantoin, its 5-Me and 5-Ph derivs., thiazolidinedione, and rhodanine and its 5-Me deriv. The Ph group in 5 position stabilizes the ring, while the 5-Me group stabilizes rhodanine, but not pseudothiohydantoin. Hydrolysis results in formation of mercapto carboxylic acids. G. M. Kozolapoff

13  
ju

TUKEVICH, N. M.

"Formation of basic and acid bismuth citrates in the thermal decomposition of bismuth ammonium citrate." (p. 1930)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1952, Vol. 22, No. 11

TURKEVICH, N. M.

Chemical Abst.  
Vol. 48 No. 9  
May 10, 1954  
Inorganic Chemistry

Formation of basic and acid bismuth citrates in the thermal decomposition of ammonium citrobismuthate. N. M. Turkevich. *J. Gen. Chem. U.S.S.R.* 22, 1977-81 (1953) (Engl. translation).—See *C.A.* 47, 5280d. H. L. H.

9-2-54  
JH



CA

Effect of ammonium and potassium salts on stability and viscosity of milk casein. N. M. Turkevich (Lvov State Med. Inst.). *Zhur. Priklad. Khim.* (J. Appl. Chem.) 25, 104-8 (1952). --Casein prepn. treated with aq. NaOH was studied in respect to the rate of filtration and the magnitude of viscosity (steel-ball method). The solns. coagulate completely on standing 12 hrs. per se. Addn. of a small amt. of 25% NaOH increases the viscosity of soln. but delays coagulation by 4 hrs. Likewise, NH<sub>4</sub> citrate, fumarate, tartrate, and oxalate and K H oxalate greatly improve the filterability of the soln. and lead to a more gradual rise of viscosity with time. G. M. Kosolapoff

TOP SECRET  
USSR

✓ Polymeric compounds of bismuth. N. M. Turkevich.  
Soobshcheniya Nauk. Rabot. Vostochno-Kavkazskogo  
in Akademiya 1953, No. 1, 18-23; *Referat. Zhur.*, KKhim.  
1954, No. 17934. The polymeric structures of acetyldibis-  
muth tartrate (I) and of Et acetylnitrosulfate (II) were  
studied. The elementary analysis gave for I the compn.  
 $C_{12}H_{10}O_{14}Bi_2$ ; for II,  $C_{12}H_{10}O_{14}N_2Bi_2$ . The detn. of the  
end groups, a method based on studying the changes in  
simple or mixed salts of volatile acids upon heating, shows  
that I is at least tetrameric. Splitting off  $H_2O$  from I and  
II by heating to 80-105° leads to the formation of 5-mem-  
bered rings. A study of the hydrolysis products of  $NH_4$   
bismuth tartrate showed that it is at least decameric.  
M. Hosen

KARPENKO, G.A.; TURKEVICH, N.M.

New printing of VIII issue, 1952, Pharmacopeia of USSR and its first supplement. Aptech. delo, Moskva 2 no. 1:59-64 Jan-Feb 1953.  
(CLML 24:1)

1. Docents. 2. Of the Pharmacy Faculty of L'vov Medical Institute (Director -- Prof. L. N. Kuzmenko), Ministry of Public Health Ukrainian SSR.

TURKEVICH, N.M.

Hydrosoluble bismuth preparations. Apt.delo 2 no.2:38-41 Kr-Ap '53.  
(MLRA 6:5)

1. Kafedra farmatsevticheskoy khimii L'vovskogo meditsinskogo instituta  
Ministerstva zdravookhraneniya USSR. (Bismuth)  
(CA 47 no.16:8319 '53)

TURKEYICH, N.M.

USSR.

Soluble bismuth compounds. VII. Compounds of bismuth with tartaric acid, their acidic properties, and polymeric structure. N. M. Turkeyich, Ukrain. Khim. Zhur. 19, 276-31 (1953); Referat. Zhur., Khim. 1954, No. 17934; cf. following abstr.—Acetyldibismuth tartrate, tetrabismutho-tartaric acid, and ammonium bismuth tartrates were studied. M. Hosh

TURKEVICH, Nikolay Mikhaylovich.

L'vov State Med Inst. Academic degree of Doctor of Pharmaceutical Sciences, based on his defense 19 June 1954, in the Council of Moscow Pharmaceutical Inst, of his dissertation entitled: "Organic Complex Compounds of Bismuth."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 13, 4 June 55, Byulleten' MVO SSSR, No. 15, Aug 56, Moscow, pp. 5-24, Uncl. JPRS/NY-537

**"APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757520020-2**

**APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757520020-2"**

MIKHALEVICH, K.N.; TURKEVICH, N.M.; PANTELEYEVA, L.I.

"Analytical chemistry of bismuth." A.I.Busev. Reviewed by  
K.N. Mikhalevich, N.M.Turkevich, L.I.Panteleeva. Zhur.anal.  
khim. 9 no.6:377-378 N-D '54. (MIRA 8:1)  
(Bismuth) (Busev, A.I.)



TURKEVICH, N. M.

USSR/Chemistry - Vegetable constituents

Card : 1/1 Pub. 116 - 10/20

Authors : Gnidets, I. R. and Turkevich, N. M.

Title : Glucoside of smartweed

Periodical : Ukr. khim. zhur. 20, Ed. 4, 396 - 398, 1954

Abstract : Smartweed, stabilized with alcohol vapors, was investigated to determine the chemical and medicinal values of the glucoside usually found in the weed. It was established that the semiacetal hydroxyl group, in the structure of the glucoside, is in a free, nonsubstituted state. The actual glucoside content of the weed was determined by the ether number of the glucoside-containing extract. Five references: 2-USSR; 1-Ukrainina; 1-USA; 1-French (1908-1953). Table.

Institution : State Medical Institute, Lvov

Submitted : October 30, 1953

*TURKEVICH, N. M.*

USSR/ Chemistry - Physical chemistry

Card 1/1      Pub. 151 - 10/33

Authors      :   Turkevich, N. M.

Title         :   Bismuth aminates, their structure and formation in aqueous solutions

Periodical   :   Zhur. ob. khim. 24/6, 978-983, June 1954

Abstract     :   The derivation of Bi-iodide aminates, through the reaction of amines with neutral aqueous solutions of potassium iodobismuthate, is described. The coordination number of Bi-atoms, present in the molecules of its aminates, was determined. The polynuclear structure of a majority of Bi-iodide aminates was analytically established. The chemical properties, of products obtained through the addition of Bi-iodide to p-dimethylamino-benzaldehyde and thiourea, are described. Fourteen references: 8-German and 6-USSR (1862-1953).

Institution :   State Medical Institute, Lvov

Submitted    :   December 17, 1953

to RAEVICH, A. M.

Synthesis of derivatives of thiazolidinone which have  
biological interest. I. Compounds obtainable from tho-  
lamine by replacement on the thiolotone group. N. M.

Turkevich and R. V. Vladimirovskaya. J. Gen. Chem. U.S.S.R.  
24, 1975-8 (1954) (Engl. translation).--See C.A. 49,  
14737i. H. M. R.

AM

TURKEVICH, N. M.

USSR

Synthesis of derivatives of thiazolidine which have biological interest. I. Compounds obtainable from the dioxane by replacement on the thioether group. N. M. Turkevich and E. V. Matveinskaya (Sov. Med. Biol.)

Levy). Zhur. Obshch. Khim. 24, 2519-44 (1951).—2,4-Thiazolidinedione (I) (10 g.) in 70 ml. EtOH and 70 ml. H<sub>2</sub>O refluxed 12 hrs. with 10 g. KOAc and 7.8 g. H<sub>2</sub>NCS-NH<sub>2</sub>, and the soln. concd. yielded 86% 1,2-thiocarbazone (II), m. 106-7° (from H<sub>2</sub>O), hydrolyzed on heating 2 hrs. with concd. HCl. II (3.8 g.) refluxed with 2.5 g. ClCH<sub>2</sub>CO<sub>2</sub>H and 30 ml. AcOH 0.5 hr., then with 50 ml. EtOH, and

refluxed 3 hrs. gave 98% (NH<sub>2</sub>COCH<sub>2</sub>SC<sub>2</sub>H<sub>5</sub>N)<sub>2</sub>, does not m. below 309°, which heated with HCl gave I. Similarly was prepd. 5-benzylidene-2,4-thiazolidinedione (III) 2-thiocarbazone, m. 180-6°. Refluxing rhodanine with H<sub>2</sub>NCONHNH<sub>2</sub>, HCl and KOAc in H<sub>2</sub>O 12 hrs. gave 93% 1,2-semicarbazone, decomp. 222°. Similarly was prepd. III 2-semicarbazone, m. 248° (from AcOH), which, refluxed with DzH in AcOH 4 hrs., gave 80% III 2-(4-benzylidene-semicarbazone), does not below m. 265°, also formed from DzH and rhodanine semicarbazone. p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NHNH<sub>2</sub> in alc. KOAc similarly gave III 2-p-nitrophenylhydrazide, m. 233° (from PhNO<sub>2</sub>). The above derivs. have acidic properties and are sol. in alk. solns. G. M. Kosolapoff

TURKEVICH, N. M.; GNIDETS, I. R.; KRYLOV, L. S.

Remarks on the new edition of the State Pharmacopoeia of the USSR.  
Apt. delo 4 no. 1:45-48 Ja-F '55 (MLRA 8:4)

1. Iz L'vovskogo meditsinskogo instituta Ministerstva zdravoo-  
khraneniya SSSR.

(PHARMACOPEIA,  
in Russia, 9th edition)

18-10-19  
The specificity of the  
group for the formation of a  
and red color.  
reactions is attributed  
destroys the analytical properties of the thioamide group.  
The groups  $\text{NHC}$ ,  $\text{SOH}$  and  $\text{C}=\text{O}(\text{SH})$  are functional.  
analytical groups for the former giving a blue  
and the latter a blue color. The  $\text{N}$  group nonacetylated  
and the latter a blue color. Also in *J. Anal. Chem.*  
M. Hesse

Turkevich H. M.

V. Synthesis of derivatives of thiazolidine having a biological interest. II. Derivatives of 2,4-thiazolidinedione 2-hydrazone preparable from p-acetamidobenzaldehyde thiosemicarbazone. E. V. Vladimirovskaya and N. M. Turkevich (Med. Inst., L'vov). Zhur. Khim. Khim. 25, 2167 (1955); cf. C.A. 49, 14737i. Heating 5 g. p-acetamidobenzaldehyde thiosemicarbazone with 2.35 g.  $\text{CICH}_2\text{CO}_2\text{H}$  and 20 ml.  $\text{AcOH}$  with 25-27 millimoles of an aldehyde 30 min. at reflux, followed by cooling and adding aq.  $\text{NaOAc}$  gave the 5-arylidene derivs. of 2,4-thiazolidinedione 2-(p-acetamidobenzylidene)hydrazones. Thus were prepd.: 92.4% 2,4-thiazolidinedione 2-(p-acetamidobenzylidene)hydrazones, decomp.  $294^\circ$ ; 80% 5,5'-benzylidenebis[2-(2-(p-acetamidobenzylidene)hydrazono)-4-thiazolidinone] (I), m.  $263^\circ$ ; 5-arylidene-2,4-thiazolidinedione 2-(p-acetamidobenzylidene)hydrazones, decomp.  $230^\circ$ ; 80% 5-(p-chlorobenzylidene) analog, decomp.  $230^\circ$ ; 5-cinnamylidene analog, 85%, decomp.  $220^\circ$ ; 190°; the 5,5'-salicylidene analog of I, 68%, decomp.  $275^\circ$ ; 82% 5-(p-acetamidobenzylidene) analog, decomp.  $275^\circ$ . G. M. L.

(2)

TURKEVICH, N.M.; GEVLICH, V.F.

Rhodanine and 2-thiohydantoin derivatives as reagents in inorganic analysis. Zhur.anal.khim. 11 no.2:180-187 Mr-Apr '56. (MLRA 9:8)

1. L'vovskiy gosudarstvennyy meditsinskiy institut.  
(Hydantoin) (Rhodanine) (Chemical test and reagents)



*Turkevich, N. M.*

*Chem* Organic complex compounds with an atom of bismuth in  
the anion. N. M. Turkevich. *Uspekhi Khim.* 28, 21: 3  
(1959).—A review with 16 references through 1957.  
G. M. Kosolovoff

✓  
①  
M. J. S. J.

TURKEVICH, N.M.; VLADZIMIRSKAYA, Ye.V.

Synthesis of thiazolidone derivatives which are interesting  
from the biological standpoints. Part 4: Ultraviolet absorption  
spectra of n-acetaminobenzylidene derivatives. Zhur.ob.khim. 27  
no.5:1348-1353 My '57. (MLRA 10:8)

L'vovskiy meditsinskiy institut.  
(Thiazolidone)

TURKEVICH, N.M.; VLADZIMIRSKAYA, Ye.V.

Synthesis of thiazolidinone derivatives, of biological interest.  
Part 5: Condensation reaction of monochloroacetic acid with  
thiosemicarbazones in the presence of hydrochloric acid. Zhur. ob.  
khim. 27 no.9:2566-2569 S '57. (MIRA 11:3)

L.I'vovskiy meditsenskiy institut.  
(Acetic acid) (Thiosemicarbazone)  
(Hydrochloric acid)

AUTHORS: Zubenko, V. G., Turkevich, N. M.

79-12-21/43

TITLE: Synthesis of Thiazolidone Derivatives Which are of Biological Interest (Sintez proizvodnykh tiazolidona, predstavlyayushchikh biologicheskii interes).  
VII. Synthesis of N-Substituted Thiocyano-Derivatives Starting From Thiocyano-Acetates (VII.Sintez N - zameshchennykh proizvodnykh rodanina, iskhodya iz rodanoatsetatov).

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, Nr 12, pp. 3275-3278 (USSR).

ABSTRACT: Of late a certain importance was attributed to N-substituted thiocyanoderivatives because of their fungicidal properties. The syntheses of these compounds mentioned in publications hitherto suffer from a great number of deficiencies. By means of investigations the authors stated that the most useful initial products for the synthesis of N-thiocyanoderivatives are the salts of thiocyanacetic acid which are of great stability and can easily be obtained by reaction of thiocyanate potassium on the sodium salt of monochloroacetic acid (see reaction process). As a condensation means glacial acetic acid was used which has the task to convert thiocyanacetates to acetic acid and to bind the separating ammonia. The saponification of the thiocyanate group is introduced by small amounts of water present in acetic acid.

Card 1/2